

## Dots and Data: Seurat, Sartre, and Merleau-Ponty

The distinction between the theoretical and the practical has been a provocative one in the history of philosophy. This is no less true in aesthetics, wherein the theory/practice distinction takes on its own special character in relation to art production and art assessment. Theory may be the ground on which the work of art is produced, a state of affairs that has become quite common in the hyperintellectualized scene of Western art in the modern era. On the other hand, in cultures where the production and assessment of art is closely tied to traditions drawn from religion, myth, superstition, no extensive theory of aesthetics is needed.

This hard and fast distinction may be contested (I don't intend to let it rest easily). However, the final measure of its fruitfulness may not be whether the difference between aesthetic theory and practice can be fully demarcated in general, but rather, how helpful it proves as a guide in the particular case. To this end, we will discuss Georges Seurat (1859–1891), a French painter most closely associated with the school of Pointillism (although he preferred the more theoretically pregnant term *chromoluminarism*). His emergence onto the scene coincided with a massive push by avant-garde artists into a theoretical discursive space previously occupied, in a mostly uncontested way, by philosophy and science. In section I, we will examine Seurat, his aesthetic theory, and his works of art. The great question with Seurat is always: what led what? Of the theory and the works themselves, which was the chariot and which was the horse that carried him to notoriety? We will first consider the empirical research underlying chromoluminarism and then introduce three of his major paintings that track the development of this technique.

In section II, we will turn to Sartre and develop a critique of chromoluminarism. This critique will issue out of the intellectual framework of phenomenology, which Husserl had originated shortly after the end of Seurat's life, as a philosophical response to psychologism and the kind of empirical research that had grounded chromoluminarism. Since Husserl has no philosophy of art to speak of, we will draw the textual examples of the phenomenological critique from two of his intellectual heirs, Sartre and Merleau-Ponty. Drawing from Sartre's aesthetic comments in *The Imaginary*, we will address the *magical* experience as the superadded experience missed by common empirical observations of artworks. We will further refine the admittedly mysterious descriptor 'magical' with a later contribution from Merleau-Ponty that addresses the same problem.

Finally, in section III, we will make a more sustained analysis of the paintings introduced in section I with the key question in mind: does Seurat's practice live up to his theory? In other words, do the works of art realize the theories that surrounded them, and can the force and beauty of the works be reduced to the successful expression of theory? I will argue that Seurat's practice deviates from his theory and that he anticipates, in practice, many of the criticisms that would have been leveled against him years later by Sartre and others. We will look for this deviation and show how Seurat utilized the magical aspect of experiencing art, years before Sartre and Merleau-Ponty joined the discussion.

## I. SEURAT AND OPTICAL MIXING

The theoretical and experimental character of Seurat's efforts lingers about the man and his works like a dense fog, making it difficult at times to properly appreciate either.<sup>1</sup> Seurat was not so distant from those of his cohorts who did not merit the distinction of being *pointillistes*.<sup>2</sup> He was interested in the rendering of the effects of light and color and used some of the same techniques as his avant-garde colleagues.<sup>3</sup> What set Seurat apart, however, was his intense interest in the scientific principles undergirding his efforts.

An immediate influence on Seurat was physicist Ogden Rood and his book *Modern Chromatics* (1879),<sup>4</sup> which discusses the theory of "optical mixture."<sup>5</sup> Briefly, the theory holds that two or more perceived colors will under certain conditions "mix in the eye," producing a resultant color different from its constituent components.<sup>6</sup> In his book, Rood relied on the experiments of Helmholtz with Maxwell's discs. Maxwell's discs are vari-colored discs set to revolve at high speeds so that the individual colors get lost in a blur to the eye and produce resultant colors.<sup>7</sup> (The optical effect is the same achieved by a vari-colored child's top, which, when spun, produces a different combination of colors than the top at rest.) Rood argued that the impression of any given individual color remained undiminished in the retina for a length of one forty-eighth of a second.<sup>8</sup> Hence, if additional rays of color entered the retina within that short interval, a mixing took place. Additionally, the colors produced by optical mixture were proven inherently more luminous than those produced by physical pigments,<sup>9</sup> and this luminosity could be maximized by finding the color pairs that produced the most intense mixtures (red/green, blue/orange, yellow/purple).<sup>10</sup> The applications of this phenomenon for artists obsessed with color and light are easily seen. Some of the color mixing typically done on the palette could be done in the eye if only the proper painting method could be found to take advantage of this scientific discovery. Whatever method was hit upon would necessarily rely on what is known as additive color (to be contrasted with subtractive color) for good effect.<sup>11</sup>

How does one put optical mixture to good effect? Certainly one could not spin the work of art, or the spectator, in imitation of the Maxwell's disc phenomenon. But the rapid alteration of light rays upon the retina could be duplicated in another way, namely, by reducing the size of one's brush stroke and increasing the variegation of the strokes so that more individual impressions of color could be caught in a single glance. These strokes, if measured and colored with scientific precision, would respond to the infinitesimal movements of the spectator's eye, both in its unstill stillness of tics, blinks, and tremors, and in its active ranging gaze as the spectator scanned the entire canvas, thus building up rapidly overlapping light ray impressions that would mingle on the retina, creating a resultant shimmer in the work as a whole.

The technique that Seurat developed to harness the artistic potential of these empirical results was chromoluminarism,<sup>12</sup> which sought to precisely determine the ratios of hue and magnitude that would produce the most intense and brilliant coloring. Though the painter was famously tight-lipped, his journals revealed him to have thoroughly appreciated the artistic implications of Rood's conclusions.<sup>13</sup>

The first major canvas to put this method to the test was *Un dimanche après-midi à l'île de la Grande Jatte*,<sup>14</sup> which showed at the Eighth Exhibition of the Impressionists in 1886. This was the last of eight influential exhibitions that united the European avant-garde against the bastion of Academic art. This unity housed within itself such disparate movements as Impressionism, Neo-Impressionism, Symbolism, and Expressionism. The shock with which Seurat's work was received, even by his avant-garde peers, forecasted the end of the avant-garde as a united front.

The famous and notorious *La Grande Jatte* depicts an apparently banal subject: the relaxed Sunday circumambulations of a cross section of French society along a river bank. However, the chromoluminarist method, which minimized the traditional brushstroke in favor of regulated clusters of paint stipples, caught the French art establishment and the public at large completely

off guard. The most conspicuous feature of the painting was the unmixed, direct application of paint stipples over the surface. Instead of mixing colors on the palette, Seurat used adjacent patches of intensely counterposed colors to evoke the luminous nuances of the Sunday scene: the tonal variation of the green trees at top (blue/yellow counterposition), the violet glow of the pipe smoker's shirt at lower left (red/blue counterposition), and the solar orange specks throughout the entire canvas that directly invoked the ray of sunlight as a singular datum (an effect now lost, as the poor-quality pigment oxidized the solar orange to a muddy shade of brown only a decade after the painting was complete).<sup>15</sup> Seurat's chromoluminarism entrusted the work of tonal/hue variation to the optical mixing, which took place exclusively in the eye, according to Rood's conclusions.

It was a radical statement by Seurat. One can easily judge the daring involved in the stylistic leap from the almost creamy brushwork of his previous major canvas, *Une Baignade*,<sup>16</sup> to the mottled surfaces of *La Grande Jatte* and afterwards to the refined radicalism of *Les Poseuses*.<sup>17</sup> *La Grande Jatte* was not universally loved.<sup>18</sup> Critical reception generally passed over, or altogether denied, any positive effects of color and light in order to lambaste the means by which these effects were achieved: *le point*. The point, the speck, the stipple, the mark, even the dreaded dot. It was here that the public perception of Seurat as a mad dotter was born.

The research underlying chromoluminarism relied on a model of experience in which what we know of the world is exactly that which can be known through our senses. This is an old notion, but has been given new import in the modern era by the British empiricists. We've come to name this model simply the empirical model of experience. In the hands of Locke or Hume, the empirical model impresses the reader with its philosophical depth. However, it is perhaps the grosser formulations of the empirical model that have proved to be the most universally influential and have sustained the scientific and technological revolutions of the modern era. And it is certainly the grosser formulation of the empirical model that sustains chromoluminarism.

What is required of the world in order for chromoluminarism to be valid? Two essential ingredients are the perceiver and the data to be perceived. Furthermore, the direction of influence must flow from the data to the perceiver. If the counterposition of red and green sometimes produced more vibrant hues for the perceiver and sometimes did not, there would be no possibility of finding the objective ratios of color and magnitude that chromoluminarism sought.<sup>19</sup> What we are imagining here, then, is a world of raw data and ourselves as the fundamentally passive recipients of this data, processing it as consistently as the smooth function of our sense faculties will allow. Thus, raw datum YELLOW enters the retina during the same processing interval as raw datum BLUE, which our limited passive sensory equipment mixes to a perceived GREEN.

Putting aside the scientific explanatory function of this empirical story, we must ask, does it capture the aesthetic experience? The aesthetic experience is concerned with what appears, and the raw data of YELLOW and BLUE (assuming these proto-colors even count as raw) do not appear. Thus a gap subsists between empirical experience and aesthetic experience.

Starting in the early part of the twentieth century, phenomenology emerged as a means to account for this gap. We will turn to some of the earliest phenomenological treatments of aesthetic experience to assess the validity of chromoluminarism as a theoretical ground for artistic practice.

## II. THE AESTHETIC THEORY OF SARTRE, AND A CONTRIBUTION FROM MERLEAU-PONTY

The aesthetic theory of Jean-Paul Sartre provides an especially instructive exemplar for our purposes because it develops gradually from a general critique of the empirical ego toward a uniquely phenomenological aesthetics, as opposed to emerging fully formed from a reflection on works of art as such. We will target three decisive moments in this development from the

following texts: (1) *The Transcendence of the Ego*, (2) *The Emotions: Outline of a Theory*, and (3) *The Imaginary*.

First, in *The Transcendence of the Ego* (1937), Sartre is at pains to argue against the notion of the ego as a passive inhabitant of consciousness, and to argue for the notion of the ego as “neither formally nor materially *in* consciousness: it is outside, *in the world*.”<sup>20</sup> If the ego shares the same ontological basis as the objects of consciousness that the ego constitutes, then the constituted objects can not be deprivileged in any way as derivative or inadequate.

Sartre’s argument against Kant puts the position in good relief. Against Kant, he argues that the reflective level of consciousness accounts for only one of two levels of consciousness. Sartre introduces the unreflective level, in which we are immersed in our constituted objects to the extent that we are for our objects—our objects are not for us. This is not to say that the ego is now derived from the constituted objects. Rather, Sartre is describing a more subtle state of affairs wherein the ego and its constituted objects are like counterweights of a balance: our existence is made up of this balancing act that leans now this way, now that way, without ever reaching the tipping point (except in the marginal cases, perhaps, of madness, physical defect, etc.). One need only substitute the work of art for the “objects” of these formulations, and the possibility of aesthetic cognition, as a mode of cognition that gives us access to objects on ontological par with the ego, is readily seen. If the work of art and the ego occupy the same ontological plane, it becomes more problematic to claim that anything like raw data is waiting to be processed into existence for the experiencing ego.

Second, in *The Emotions: Outline of a Theory* (1939), Sartre parlays the results gained in this new stance on the ego in order to develop a phenomenological theory of emotions.<sup>21</sup> If the ego is outside and in the world, how should we understand the emotions? Not as in the classical theories wherein the ego resides like an inhabitant of consciousness, waiting to be affected, either by physiological modifications that are somehow translated into emotions, or by the consciousness of psychological manifestations (as in William James). Neither of these theories, nor any further theory based on *a priori* principles or postulates, can account for what Sartre calls the finality of emotion: that is, the significance of the emotion, which is not to be reduced or abstracted out of the experience of the emotion.

For example, if a swastika is emblazoned in brilliant red, black, and white across a wall, the viewer’s ire may be aroused immediately. What is the object of ire? Sartre’s contention is that at the unreflective level the insignia itself is the object to be hated. And, indeed, for some the insignia arouses feelings of anger and disgust just as powerful as if Adolf Hitler himself had walked into the room. However, if we stepped back from the Nazi banner and realized it was hanging in a gallery within an artistic context, instead of a genocidal one, then our emotional and aesthetic relationship to the swastika might change.<sup>22</sup> In stepping back, we may say something like, “Well, the banner itself is not so hateful. It is the history of hate and genocide that really arouses my wrath. Perhaps it will turn out to be acceptable, if I investigate the context.” This recalculation is a reflective, second-order operation, and it is entirely legitimate. But if one begins the investigation of emotions at this second-order level, as Sartre charges the classical theories have done, the entire level of unreflective activity will have been lost.

Both of these texts lay the critical groundwork for a post-empirical elaboration of aesthetic experience. If the ego is radically exteriorized, “in the world,” and not a passive recipient waiting to be fed data, how might this color our experience in general? And our experience of art in particular?

Finally, in *The Imaginary* (1940),<sup>23</sup> Sartre develops a phenomenological examination of the image and imagination that culminates in the coda “The Work of Art.” The coda is the last result of the analysis of imaging, or image-consciousness, that Sartre has developed throughout *The Imaginary*. Image-consciousness is a mode of consciousness in which images are the constituted objects. Visual works of art are, perhaps, the model *par excellence* for images; and yet a difficulty accompanies this status because of the peculiar motivations surrounding the work of art. A

painting is not merely an image—it is an image *meant as an image*. Sartre touches upon this peculiar state of affairs in his analysis of the portrait-image of Charles VIII:<sup>24</sup>

In the image-portrait [in contrast to the sign and the mere image]..., the object is posited as absent, but the impression is present. There is an irrational synthesis that is difficult to explain. I look, for example, at a portrait of Charles VIII at the Uffizi in Florence. I know that it is Charles VIII, who is dead. It is this that gives my present attitude its sense. But, on the other hand, those sinuous and sensual lips, that narrow, stubborn forehead, directly provoke in me a certain affective impression, and that impression directs itself to *these lips*, as they are in the picture.... Finally the two functions merge, and we have the imaged state: the dead Charles VIII is there, present before us. It is he that we see, not the picture, and yet we posit him as not being there: we have only reached him ‘as imaged,’ ‘by the intermediary’ of the picture. One sees that the relation that consciousness posits in the imaging attitude between the portrait and its subject is magical. Charles VIII is at one and the same time over there in the past and here. Here, in a state of reduced life, with a mass of determinations missing (relief, mobility, sometimes colour, etc.) and as *relative*. Over there, as absolute.<sup>25</sup>

The imaging of the portrait-image is uniquely characterized by two aspects. One aspect presents the absent Charles VIII; the other aspect presents just *this* impression, *these* lips, *this* narrow forehead, etc., that are confined to the canvas. Together they constitute the imaging, the image-consciousness, the imaged-state in which the dead Charles VIII is actually made present.<sup>26</sup> In some circumstances we will unreflectively pass over the intermediate by which we grasp an object, as with signs and mere images wherein we are almost absentmindedly directed to their meaning. Not so with works of art: they demand reflection; the particularly sinuous lips of Charles VIII are not to be surpassed in the directedness to the intentional object. Charles VIII is made present in a sort of tense conjunction with the aspect through which the object of our imaging consciousness is accessed, sinuous lips and all. Perhaps it is this unmitigated tension that characterizes the greatest works of art; the ones that demand our attention and hold us spellbound in a magical dialogue with an absent subject.

With Sartre’s notion of imaging in mind, we can broach our first formal criticism of Seurat’s chromoluminarist method. Namely, if the fecundity of a work of art is born out of the perpetual congress between its two layers of complexity, the image and the meant-image, then would not a composition built up from assembled dots, marks, stipples, etc., which mean nothing in themselves, produce a necessarily sterile picture? This is not to say that one cannot interpret a green dot as grass or a blue dot as sea. Certainly one can. But the type of magical dialogue we have seen between the image and the meant-image in the example of Charles VIII, in which the bygone lips of the deceased king spoke with the sinuous lips of the presented king, cannot be sustained with dots. Once the penetrative interpretation from the meaningless dots to the meaningful dot-constituted object has occurred, the conversation stops. The conversation must stop, because to reverse course is to sink back into meaninglessness, and meaninglessness does not constitute an interpretation or engagement of any kind. Rather, a lack thereof.

A contemporary reviewer of the Eighth Exhibition aired a criticism similar in spirit, writing for *Le Journal*, “To decompose is not to create.... This does not outlaw the exercise of critical intelligence, of noble and necessary analysis. But one has to recompose.”<sup>27</sup> At the basic level of good artistic judgment, this criticism amounts to the charge that Seurat went a bridge too far with his division of color. The dot demands too much of the observer at the outset and stifles the magical dialogue of the work of art before it can commence. Sartre’s aesthetic theory and the contemporary review of Seurat must agree on this point.

But can we rest here? Sartre's aesthetic theory as developed in *The Imaginary* would gut the history of art of all nonrepresentative works because the critical dialogue between image and meant-image is absent. Surely, this is an intolerable state of affairs. We will attempt to leaven the extremity of Sartre's position with a contribution from Merleau-Ponty published five years later.

In a chapter from *Phenomenology of Perception* (1945) titled "The 'Sensation' as a Unit of Experience,"<sup>28</sup> Merleau-Ponty revisits the view that "pure sensation will be the experience of an undifferentiated, instantaneous, dotlike impact." This is once again the gross empirical model of experience. And yet there is a temptation to understand sensation in this way, to think of ourselves as the passive receptors of neatly packaged perceptual data delivered from the external world. The conclusions of optical mixture are predicated on this model. However, Merleau-Ponty offers a brief thought experiment to justify his notion that the experience of sensation may differ from a causal, scientific account of the same sensation. He writes:

Let us imagine a white patch on a homogeneous background. All the points in the patch have a certain 'function' in common, that of forming themselves into a 'shape.' The color of the shape is more intense, and as it were more resistant than that of the background; the edges of the white patch 'belong' to it, and are not part of the background although they adjoin it: the patch appears to be placed on the background and does not break it up. Each part arouses the expectation of more than it contains, and this elementary perception is therefore already charged with a *meaning*.<sup>29</sup>

The attempt to understand the white points as basic units of undifferentiated perception fails. The points become subordinate to the meaningful constitution of the white patch at the very moment they are perceived; they become differentiated as border-points, center-points, north-points, south-points, etc., and lose their "freedom." In fact, even the notion of picking out points at the unreflective level is questionable. The patch would appear first, and a second-order reflection would be required to thematize various portions of the patch. This is so because even the most basic object of perceptual experience is invested with meaning, understood in relation to a perceptual "field." Merleau-Ponty concludes, "An isolated datum of perception is inconceivable."<sup>30</sup> And yet, the isolated datum of perception—as the light ray upon the retina—is precisely what the theory of optical mixture requires.

Merleau-Ponty has improved on Sartre's aesthetic theory by extending the phenomenological critique of aesthetic experience beyond the robust images of "The Work of Art" to the nonrepresentative qualities of art. The extended critique presumably encompasses the dots, stipples, and striations of Seurat's paintings. And yet he insists the isolated datum of perception is inconceivable. This cannot mean that we have no sense of the dots of yellow and blue that are being manipulated to form a third resultant color. When we view "*La Grande Jatte*" up close, we see these individual dots—and whatever we can perceive, surely we can conceive. But have we not made a decisive shift in the mode of our attention when, pulled back at distance from the painting and seeing only the resultant green, we conceive it as a mixture of two unseen colors?

The critical point is that an interplay of color indeed occurs on the canvas such that the correct juxtaposition of color and magnitude will produce greater luminosity. However, *it is an interplay between seen colors, not unseen colors, which hardly matter for aesthetic experience*. For this reason, chromoluminarism, as a quasi-science of *unseen color* manipulation, must fail as a valid theoretical ground and guide for the practical production of paintings.

Great works of art, however, do not fail as easily as theories of art. So, if we find the theory lacking and the picture virtuous, it is time to look to the picture again to see if our theoretical appraisals are just. Now, we will consider the artworks themselves to see if, when, and where practice outpaces theory.

## III. PRACTICE AND THEORY

I will focus on Seurat's first three major canvases: *Une Baignade* (1883–1884), *Un dimanche après-midi à l'île de la Grande Jatte* (1884–1885; subsequently reworked), and *Les Poseuses* (1887–1888), examining them as a critical stylistic juncture in the incorporation of chromoluminarist theory into his works. We will note where theory enters into the picture and how fully it dominates the practical aspects of Seurat's technique.

His first major canvas, *Une Baignade* [\[link\]](#),<sup>31</sup> serves as a good “control” case. Although it was painted just before *La Grande Jatte*, there are no major indications of the technical revolution to come. The picture depicts a group of bathers escaping a midsummer's heat against a cool, blue backdrop of a pale sky, the deeper-hued blue-violet of the river, and the blue-green grass. Cross-hatching brushwork is used to conjure up the coarser textures of the dry summer grass and the flowing river, but the technique does nothing to distinguish itself from a Pissarro or even from some of the more adventurous Academic painters. Chromoluminarism has not yet exerted itself. *Une Baignade* does exhibit some inadvertent optical mixture via the stippling technique here and there; but, in general, Seurat stippled only to open up a space of textural contrast between his supernaturally smooth-textured human figures and their more rough-edged natural backdrop.

Seurat's employment of optical mixture became more rigidly codified in his next major canvas, *Un dimanche après-midi à l'île de la Grande Jatte* [\[link\]](#).<sup>32</sup> Most commentators mark this painting as the major leap forward into his mature method. One finds evidence of the programmatic employment of optical mixing alongside more traditional methods.

Consider the bottom left border of the canvas wherein we see the tall yellow-green of the marsh grass adjacent to a red-blue vertical band. The band was part of the internal “frame” Seurat painted to heighten the color effects of the canvas. What makes this detail especially interesting is that it shows two strategies of color-mixing at work. First, there is apparent optical mixture of red and blue to create a deep purple. The red and blue are segregated into their separate dots even while tightly bunched. The net result is that the eye loses track of the individual dots and, if chromoluminarism holds true, the separate dots mingle in the eye to produce a more brilliant purple.

This deep purple is counterposed against the yellow-green marsh grass (once again, along the lower left margin of the picture), which relies on traditional pigment mixture to achieve tonal variation. The traditional method of mixing pigment is simply mashing different colors together to get a new color. This mashing can be done at the paint factory, on the artist's palette, or on the picture surface itself. In the overlapping striations of the marsh grass, we see yellow mix into different hues of green, with the occasional stroke of blue to both provide a deep undertone and indicate the presence of water behind the grass. Although the formal similarity of the striations to the more radical dot brings chromoluminarism to mind, this technique is strictly in keeping with what one would have learned at the Academy. If it were genuine optical mixture, we would expect to see the marsh grass composed of light blues and yellows in order to produce an intense resultant green. Instead the green is mixed either on the canvas (as blue and yellow mash to green) or in the factory (as when Seurat directly applies various green pigments). Furthermore, the prevalence of green across the entire canvas shows that the conspicuous emergence of the dotting technique obscures the fact that Seurat had not fully embraced, or fully understood, the theory of chromoluminarism that the dots apparently heralded.

Seurat followed up the ambitious *La Grande Jatte* with an equally ambitious canvas, *Les Poseuses* [\[link\]](#).<sup>33</sup> It marks a moment of great confidence in his technique, as Seurat felt fit to tackle the nude form—the common currency of Western art throughout the ages—and the picture represents his bid to find his place in history. The picture also abandons nature, as the entire scene takes place within Seurat's studio. Ironically, green returns, but only in the form of a reproduced *La Grande Jatte* hung on the back wall of the studio scene. Against the literal backdrop of his

previous effort, Seurat applied the theory of chromoluminarism with a previously unmatched consistency. The formal variations of brushwork that we still saw in *La Grande Jatte* are replaced by uniform dots, and the scarcity of directly applied secondary colors means that the weight of tonal and hue variation will fall almost entirely on the technique of optical mixture.

However, the original targets of the technique—greater luminosity and more brilliant color—did not necessarily keep pace with the evolution of Seurat's technical practice. The canvas has a decidedly muted tone, enlivened in the few places where, in violation of chromoluminarist technique, unmixed secondary colors like green and orange were allowed to leaven the chromatic space. Note how the directly applied green of the model's stockings in the lower right relieves the general monotony of that region.

The muted tone may be the result of overemployment of the optical mixing of red and blue. Instead of producing a more brilliant violet, a dull sheen of brown seems to coat the painting. This effect can be overcome, of course, by moving closer to the painting until the red and blue stipples emerge in their individuality. But once the individual stipples emerge, there is no optical mixing, and the viewer is instead overwhelmed by unleavened fields of intense red and blue stipples that can produce a disorienting sensation combined with a marked decomposition of subject matter. All the textures, shading, and contours are lost when the picture is approached too closely and the optical mixture is undone. The most successful color contrasts in the painting involve simple primary colors that require no mixing at all, such as the adjacent regions of red and blue seen in the red parasol against the blue robe at the bottom of the canvas.

The dull brown sheen originates in the misexecution of optical mixing. The primary colors of optical mixing are not the red, yellow, blue of pigment mixing.<sup>34</sup> In fact, the primaries of optical mixing are red, green, and blue-violet.<sup>35</sup> This is a critical mistake: a mistake that Seurat and the chromoluminarists, who were attempting to ground artistic practice on the science of color analysis, were totally unaware of. If one attempts to produce purple through optical mixing while employing the primaries of pigment mixing, red and blue, a muddy brown will occur instead of purple.<sup>36</sup> Mistakes of this sort may account for pervasive brown sheen of *Les Poseuses* that depended for relief upon the occasional hint of a green stocking, orange corsage, or the hulking nature scene of *La Grande Jatte* in the background. Would Seurat's approach have changed had he successfully distinguished the primary colors of optical mixing and pigment mixing? It is impossible to say.<sup>37</sup>

It's quite possible, on the other hand, that the ostensible theoretical goal of chromoluminarism—more brilliant colors and greater luminosity—was surpassed in importance for Seurat by the practical results achieved. Seurat's later major canvases capitalized on the dull brown by concentrating on dimly lit night scenes and smoky interiors. In the final analysis, the disconnect between the empirical machinery of the theory of chromoluminarism and one's actual aesthetic experience did not sabotage Seurat's artistic efforts, because he ultimately relied on the aesthetic qualities of the evolving picture as the proper grounds for artistic decisions. Whether this involved critical departures from theoretical consistency (see the expanses of traditionally mixed green in both *La Grande Jatte* and *Les Poseuses*) or manipulating his thematic material to accord with his practical technical results (see the turn to smoky interiors), it amounts to same thing: for Seurat, practice trumped theory. Once the aura of a consistent scientific method is dispelled, we are allowed to see Seurat as the trial-and-error painter that he really was.

## IV. CONCLUSION

We began by asking about the relative priority of theory versus practice in the aesthetic realm and used Seurat as a case study for this question. Much discussion of Seurat and his technique suggests that he was an artist obsessed with and determined by theory. But after examining the theory of chromoluminarism, distinguishing between explanatory empirical models of experience and aesthetic experience, and finally approaching three of his major works with a critical eye, we concluded that Seurat's practice was paramount.

This result is a local result and should not be carelessly applied over the general question of theory/practice in aesthetics. We can, however, profitably export a few threads of the discussion into the general domain.

First, the relative priority of theory versus practice in art production will depend on how strenuous our standards for theory are and whether the theory incorporates aesthetic experience into the equation. Philosophers and scientists tend to have high standards for what makes a theory. It cannot simply be a collection of myths and prejudices; it must apply to the real, objective world—and chromoluminarism certainly seems to have this ambition. As we saw in section I, the theory of chromoluminarism was wholly concerned with the optical mechanics of color mixture. The story of optical mixture takes place in the drama of unseen proto-colors marrying on the surface of the retina—when these colors finally produce the resultant color, the story is finished. And yet, this is precisely the point where the story begins for aesthetic experience in the evaluation of paintings. Whether a luminous green is produced in the retina or on the canvas is all the same in aesthetic experience. The color counterpositions that will ultimately orient our chromatic experience of the painting are not the unseen proto-colors, but rather *the seen colors, the colors in play on the canvas*.

There is a tension here because the empirical account does not necessarily need the account of aesthetic experience, and vice versa. Scientists and artists do not always need to cross paths. But if we are to allow the possibility of a successful dialogue between theory and practice in aesthetics, without giving way to either a hardened cerebralism or a dreamy romanticism, we need to find a discourse that can accommodate both poles of the opposition.

Second, the phenomenological critique introduced in section II appears to be this discourse. This is not because scientific, theoretical accounts of the empirical ego and its world are necessarily wrong; it is because these accounts do not accurately describe our aesthetic experience. Consciousness is a complicated aggregate of ongoing shifts of attention. The ego is the thread of continuity that can potentially clarify the interconnectedness of disparate objects of consciousness, but only if we carefully regard what we are directed to in an object of consciousness, and how we are directed to it. It is the aesthetic experience that leads us to what shows itself in the work of art—and that is what must determine the course of art appreciation.

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1. Sometimes this is merely an unfortunate coincidence; for example, consider the misleading coincidence of the English word 'point' and the French word 'point,' which forms the basis for the overexalted term 'pointillisme.' The coincidence is not entirely arbitrary. Both kinds of 'point' share the sense of 'being a dot,' but the French 'point' has a background of related meanings, like 'speck,' 'stipple,' 'mark,' and 'stitch,' which significantly stretch the notion of what 'pointillisme' might be. A speck is irregularly shaped; a stipple typically looks like an abbreviated stroke with squared edges; a mark is quite a lot of things; and so on. Impressionism experimented with all these methods of paint application. One

thinks of the short, soft strokes of Renoir's daytrippers, of Monet's haystacks, and of the mottled striae of Camille Pissaro's town and country scenes.

2. More derisively, "les Confettistes." See Pierre Courthion, *Georges Seurat* (New York: Abrams, 1988), 23. The artist preferred to call his style 'chromo-luminarisme' or 'peinture optique.' See William Innes Homer, *Seurat and the Science of Painting* (Cambridge, MA: M.I.T. Press, 1964), 11.

3. Specifically, the technique of color-division. He would have been unimpressed with the notion of *pointillisme* as the mere rendering of a measured field of uniform dots, mechanically applied—as dots above all—and yet this notion dominated the public and critical reception of impression of Seurat until quite recently.

4. Ogden Rood, *Students' Text-Book of Color; or, Modern Chromatics, with Applications to Art and Industry*. (New York: D. Appleton and Co., 1879). Reprinted as *Modern Chromatics: Students' Text-Book of Color* (New York: Van Nostrand Reinhold Co., 1973).

5. We cannot go without mentioning two other major influences, Eugene Chevreul and Charles Henry. See Homer, *Seurat and the Science of Painting*, 8. For our purposes, however, we will bypass them: Chevreul, because his conclusions were essentially a duplication of Rood's own, minus the scientific rigor; Henry, because his influence extended mainly to composition, instead of color.

6. *Ibid.*, 39.

7. For instance, the blurring of red and blue produces the resultant color of purple.

8. See Rood, *Modern Chromatics* (1973), 143.

9. See John Rewald, *Georges Seurat* (New York: Wittenborn, 1946), 32. This conclusion was exemplified in various formulations by Rood, but it was most famously trumpeted by the great critic Felix Fénéon. The critic, in an article that stands as one of the great early defenses of Seurat's efforts, included a formulation of Rood's that compares pigment-mixing to light ray-mixing to the effect that the pigment-mixture requires more "units" of color to achieve the same luminosity as the light ray-mixture.

10. These results were first observed by Eugene Chevreul in his *De la loi du contraste simultané des couleurs* and Charles Blanc's *Grammaire des art du dessin* before being scientifically elaborated by Rood. See Rewald, *Georges Seurat*, 2.

11. Homer, *Seurat and the Science of Painting*, 8. We will discuss additive and subtractive color further on, but we can make two important preliminary remarks. First, the distinction concerns the medium of color mixture. Additive color involves the mixing of colored lights, appropriate to the optical mixture we discussed above; subtractive color involves the physical mixing of colored pigments, say, on the artist's palette. Second, Seurat knew of this distinction, of course; this is the distinction introduced to him by Rood; but he was ignorant of the fact, as was Rood and the world of science at the time, that the primary colors involved in additive mixture changed to red, green, and blue-violet (as opposed to red, yellow, and blue in subtractive mixture). This will have a tremendous impact on our critical discussion of Seurat.

12. Often referred to as color-divisionism. See John Russell, *Seurat* (London: Thames & Hudson, 1965), 144.

13. For excerpts of Seurat's personal papers in which Rood's color wheels and conclusions are reproduced, see Homer, *Seurat and the Science of Painting*.

14. Georges Seurat, *Un dimanche après-midi à l'île de la Grande Jatte*. Art Institute of Chicago, <http://www.artic.edu/aic/exhibitions/seurat/SeuratOverview.html> (accessed August 29, 2009).

15. *Ibid.* For a discussion of the effects of the oxidization of the solar orange, see Homer, *Seurat and the Science of Painting*, 132. The brown traces of the once-brilliant solar orange can be most readily appreciated in the green grass expanse. The vast majority of the brown stipples here were originally orange, which must have considerably heightened the luminosity of the work.

16. Georges Seurat, *Une Baignade*. Artchive, <http://www.artchive.com/artchive/S/seurat/asnieres.jpg.html> (accessed August 29, 2009).

17. Georges Seurat, *Les Poseuses*. Emsworth, [http://emsworth.files.wordpress.com/2009/06/georges\\_seurat\\_-\\_les\\_poseuses1.jpg](http://emsworth.files.wordpress.com/2009/06/georges_seurat_-_les_poseuses1.jpg) (accessed August 29, 2009). His other major works are *La Parade de Cirque* (1887–1888), *Le Chahut* (1890), and *Le Cirque* (1891; unfinished).

18. Albert Wolf, art critic for *Le Figaro*, described Seurat's circle as "Communards who deserve to be shot." See Pierre Courthion, *Georges Seurat* (New York: Abrams, 1988), 24.

19. Marginal cases such as color blindness further support the priority of data over perceiver. If influence flowed from the perceiver to the data, marginal cases would have no objective sense.

20. Jean-Paul Sartre, *The Transcendence of the Ego* (New York: Farrar, Straus and Giroux, 1991), 31.

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21. Jean-Paul Sartre, *The Emotions: Outline of a Theory* (New York: Philosophical Library, 1975).
  22. For some, depending on the work, the feeling of horror, arousal, fear, etc. will remain. This is precisely the tension with which provocative art plays.
  23. Jean-Paul Sartre, *The Imaginary* (New York: Routledge, 2004).
  24. See portrait of Charles VIII: Encyclopedia Britannica, <http://media-2.web.britannica.com/eb-media/27/7327-003-5AF21D3F.gif> (accessed August 29, 2009). The artist is unknown.
  25. Jean-Paul Sartre, *The Imaginary* (New York: Routledge, 2004), 23–24.
  26. We could reword this in Husserlian terms by distinguishing between the intentional object of the image-consciousness and the aspect (*die Abschattung*) by which we gain access to the intentional object.
  27. Apparently this is a paraphrase of Balzac. Courthion, *Georges Seurat*, 36.
  28. Maurice Merleau-Ponty, *Phenomenology of Perception* (Athens: Ohio University Press, 1981), 3–4.
  29. Ibid.
  30. Ibid, 4.
  31. Seurat, *Une Baignade*.
  32. Seurat, *Un dimanche après-midi à l'île de la Grande Jatte*.
  33. Seurat, *Les Poseuses*.
  34. The primaries of pigment mixing, also known as the subtractive primaries, have been further refined to yellow, magenta, and cyan. Their “color regions” remain the same, however, and green is still a secondary color in this refinement.
  35. See Homer, *Seurat and the Science of Painting*, 10.
  36. For a side by side view of the color tables, see “Color Mixing,” Wikipedia, [http://en.wikipedia.org/wiki/Color\\_mixing](http://en.wikipedia.org/wiki/Color_mixing) (accessed November 11, 2009)
  37. After *Les Poseuses*, he turned towards the effects of artificial light in darkened environments. The same brown glow dominates the darkened street scene of *La Parade* and the dim nightclub interior of *Le Chahut*. Even the unfinished *Le Cirque* appears headed in this direction—a final testament to a lost luminosity and brilliance.

### Bibliography

- Broude, Norma. *Seurat in Perspective*. Englewood Cliffs, NJ: Prentice Hall, 1978.
- Courthion, Pierre. *Georges Seurat*. New York: Abrams, 1988.
- Herbert, Robert L. *Seurat and the Making of La Grande Jatte*. Irvine: University of California Press, 2004.
- Homer, William Innes. *Seurat and the Science of Painting*. Cambridge, MA: M.I.T. Press, 1964.
- Merleau-Ponty, Maurice. *Phenomenology of Perception*. Athens: Ohio University Press, 1981.
- Rewald, John. *Georges Seurat*. New York: Wittenborn, 1946.
- Rood, Ogden. *Modern Chromatics: Students' Text-Book of Color, with Applications to Art and Industry*. New York: Van Nostrand Reinhold Co., 1973.
- Russell, John. *Seurat*. London: Thames & Hudson, 1965.
- Sartre, Jean-Paul. *Being and Nothingness*. New York: Washington Square Press, 1984.
- . *The Emotions: Outline of a Theory*. New York: Philosophical Library, 1975.
- . *The Imaginary*. New York: Routledge, 2004.
- . *The Transcendence of the Ego*. New York: Farrar, Straus and Giroux, 1991.